

NANOPARTICLE-BASED CONTROLLED RELEASE POLYMER COATINGS FOR MEDICAL IMPLANTS

ABSTRACT

Implantable medical devices having a nanoparticle coating applied thereon. The nanoparticle coating comprises nanopulverized antiproliferative compounds. More specifically, the nanoparticulate antiproliferative compounds comprise particles less than 500 nm in size. The nanoparticle size of the compounds improves compounds' solubility. In addition to improving the solubility of otherwise insoluble antiproliferative compounds, the nanoparticle size minimizes the preparation and formulation required to prepare a dose of the antiproliferative compounds.